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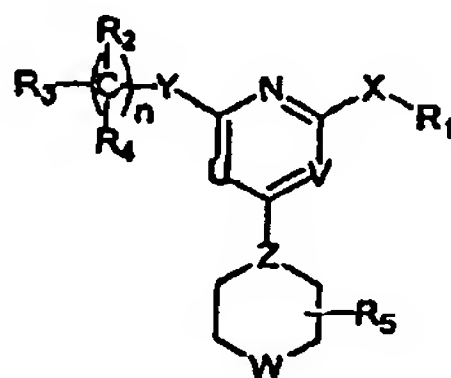
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(54) Title: HETEROCYCLIC COMPOUNDS FOR PREVENTING AND TREATING DISORDERS ASSOCIATED WITH EX-
CESSIVE BONE LOSS



(I)

(57) Abstract: This invention relates to pyrimidine compounds of formula (I), formula (I') and formula (I''): formula (I) and phar-
maceutically acceptable salts, solvates, clathrates, and prodrugs thereof, wherein R₁, R₂, R₃, R₄, R₅, U, V, W, X, Y, Z, and n are
defined herein. This invention also relates to compositions comprising these compounds and methods for using them. The com-
pounds and compositions of this invention are useful to treat or prevent disorders associated with excessive bone loss, including,
without limitation periodontal disease, non-malignant bone disorders (such as osteoporosis, Paget's disease of bone, osteogenesis
imperfecta, fibrous dysplasia, and primary hyperparathyroidism) estrogen deficiency, inflammatory bone loss, bone malignancy,
arthritis, osteopetrosis, and certain cancer-related disorders (such as hypercalcemia of malignancy (HCM), osteolytic bone lesions
of multiple myeloma and osteolytic bone metastases of breast cancer and other metastatic cancers).

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